STATE OF MARYLAND

DHMH

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March 18, 2011

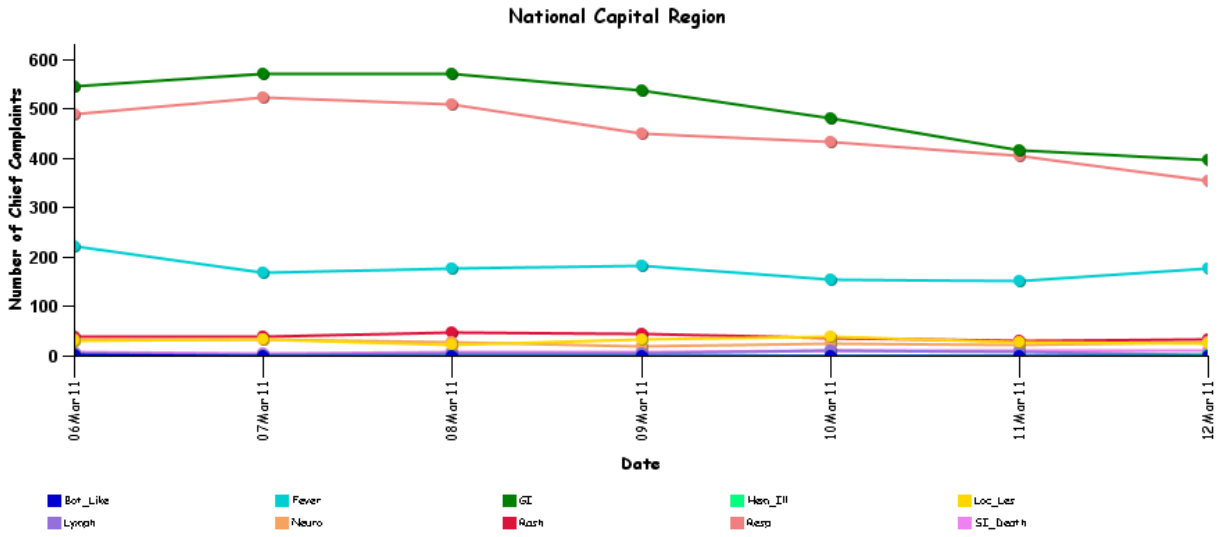
Public Health & Emergency Preparedness Bulletin: # 2011:10
Reporting for the week ending 03/12/11 (MMWR Week #10)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

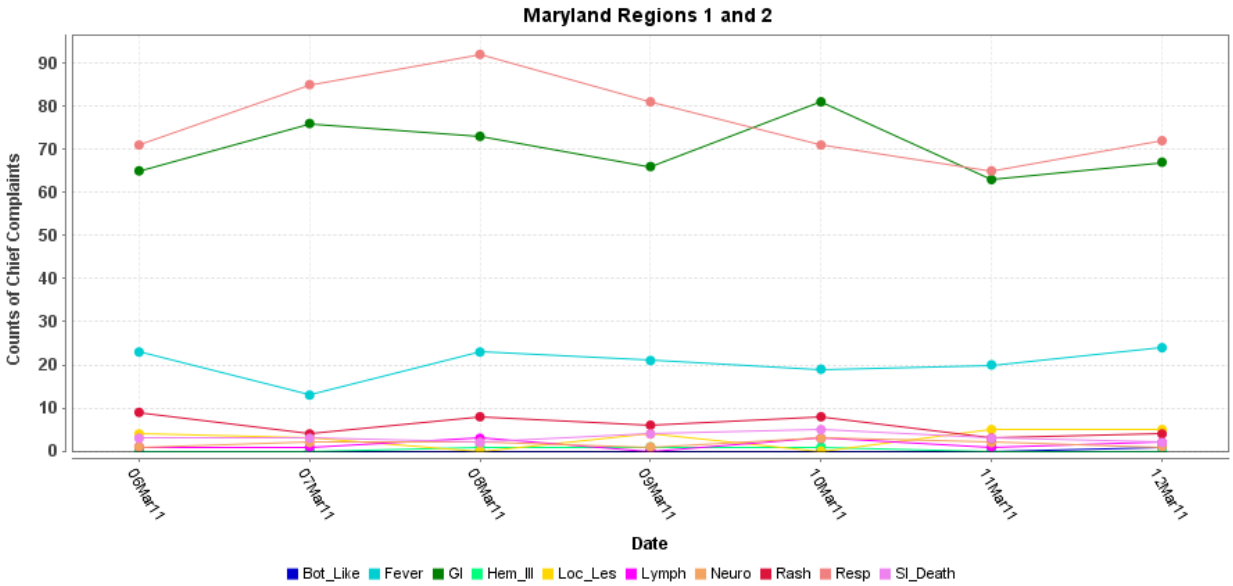
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

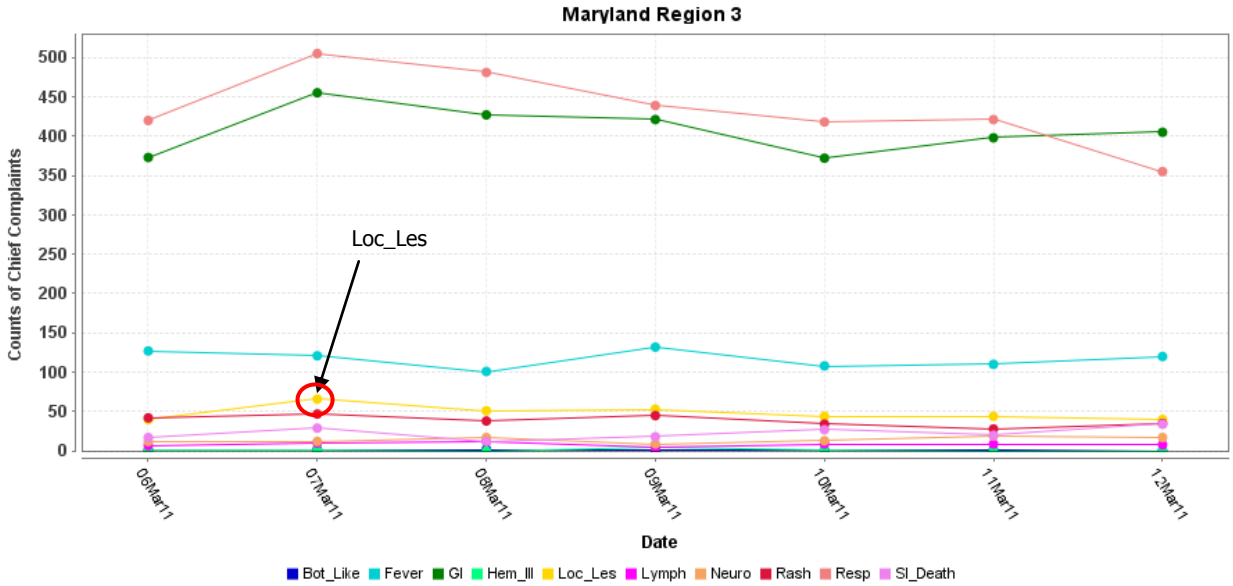


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

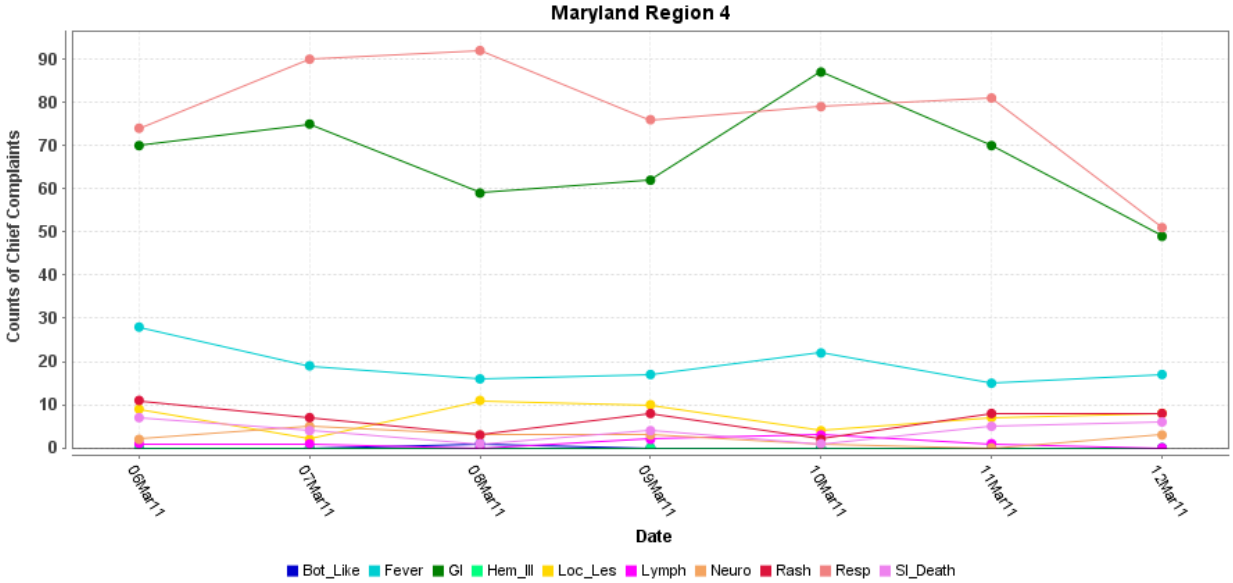
MARYLAND ESSENCE:



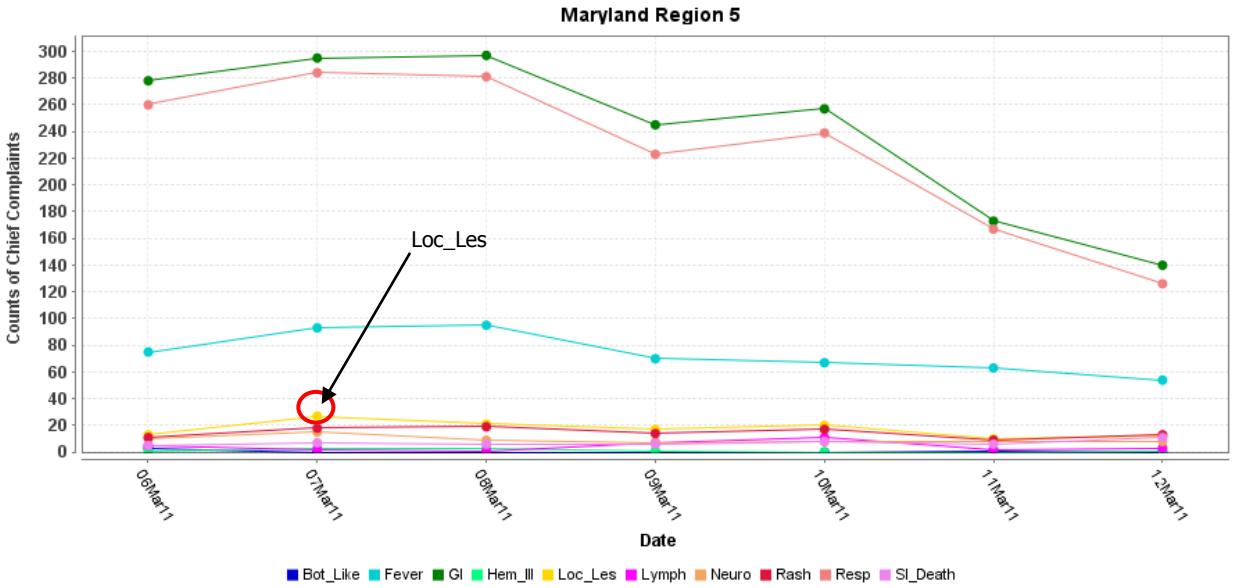
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



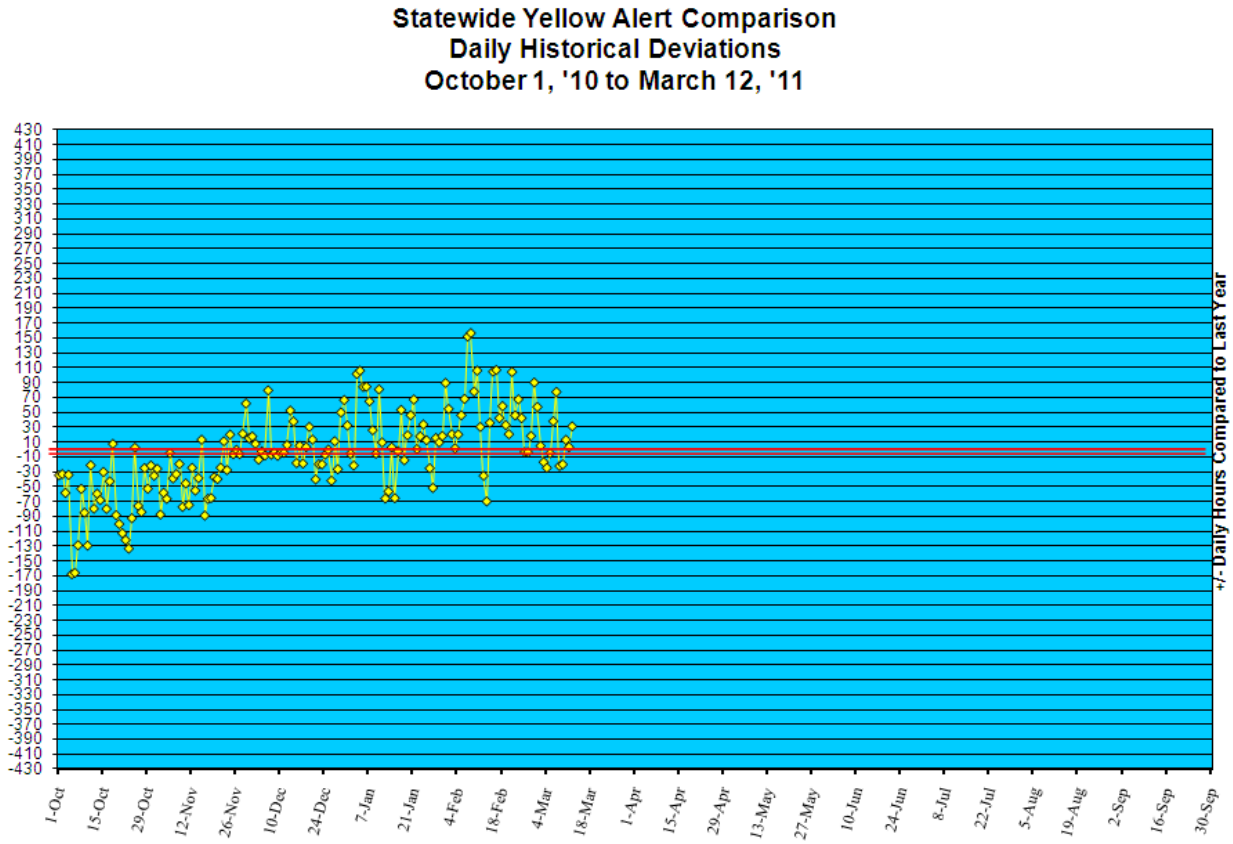
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (March 06 – March 12, 2011):	7	0
Prior week (February 27 – March 05, 2011):	11	0
Week#10, 2010 (March 07 – March 13, 2010):	10	0

13 outbreaks were reported to DHMH during MMWR week 10 (March 6-12, 2011)

7 Gastroenteritis outbreaks

3 outbreaks of GASTROENTERITIS in Nursing Homes
2 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS associated with an athletic event

2 Foodborne outbreaks

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Wedding
1 outbreak of SALMONELLOSIS associated with a Fund Raising Event

3 Respiratory illness outbreaks

2 outbreaks of INFLUENZA in Nursing Homes
1 outbreak of PNEUMONIA in a Nursing Home

2 Rash illness outbreaks

1 outbreak of Rash illness in an Assisted Living Facility
1 outbreak of Rash in a School

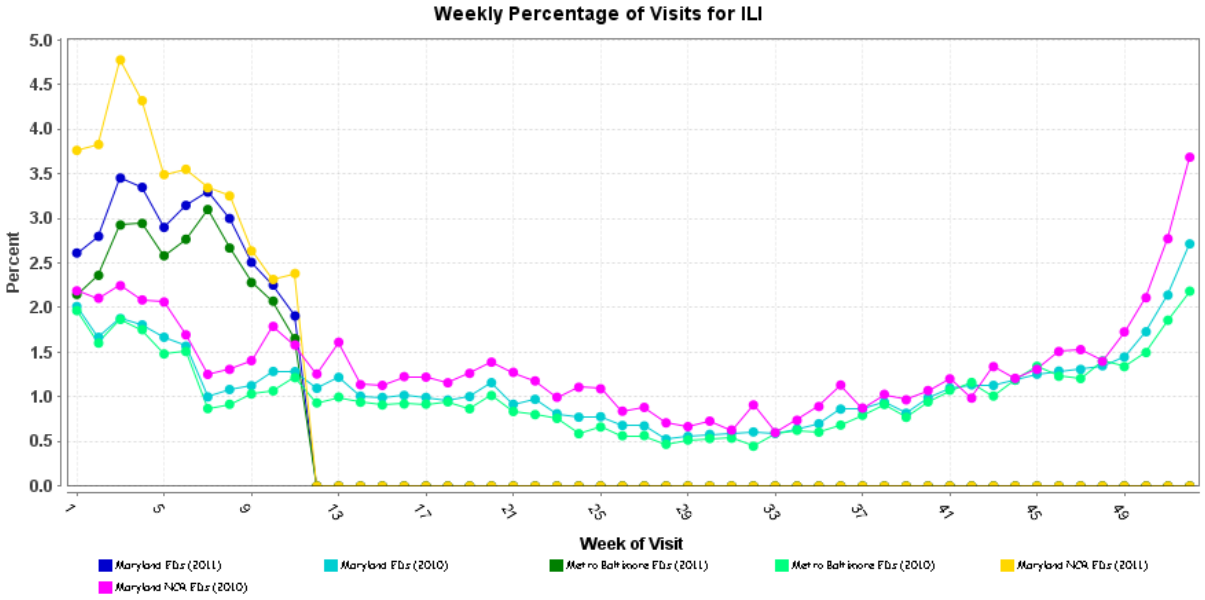
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was REGIONAL for Week 10.

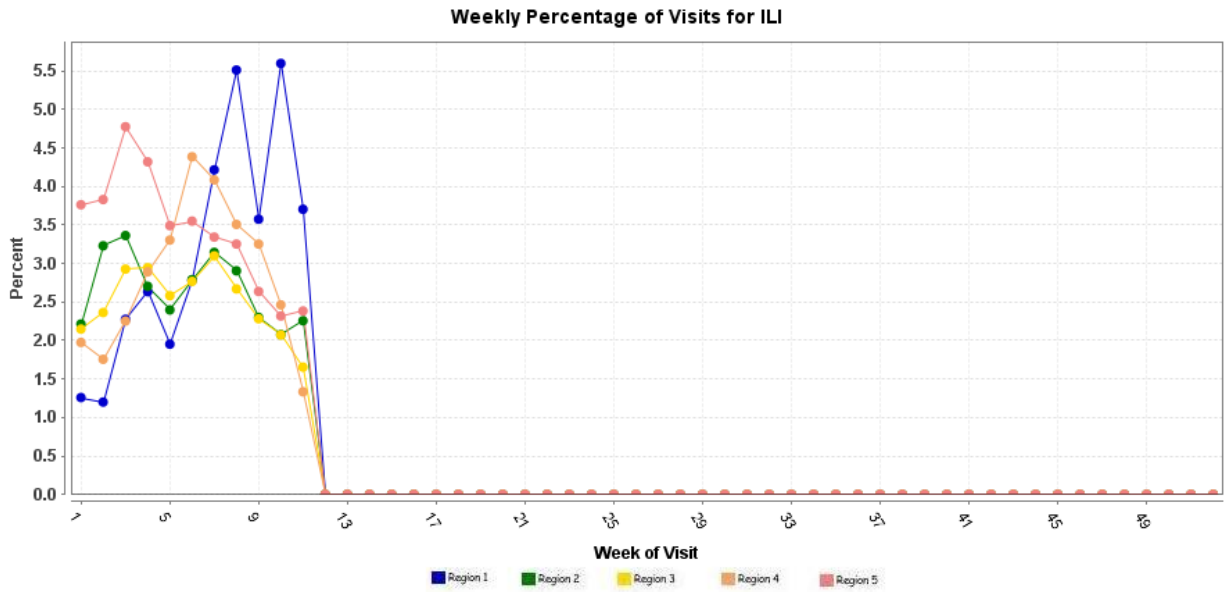
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



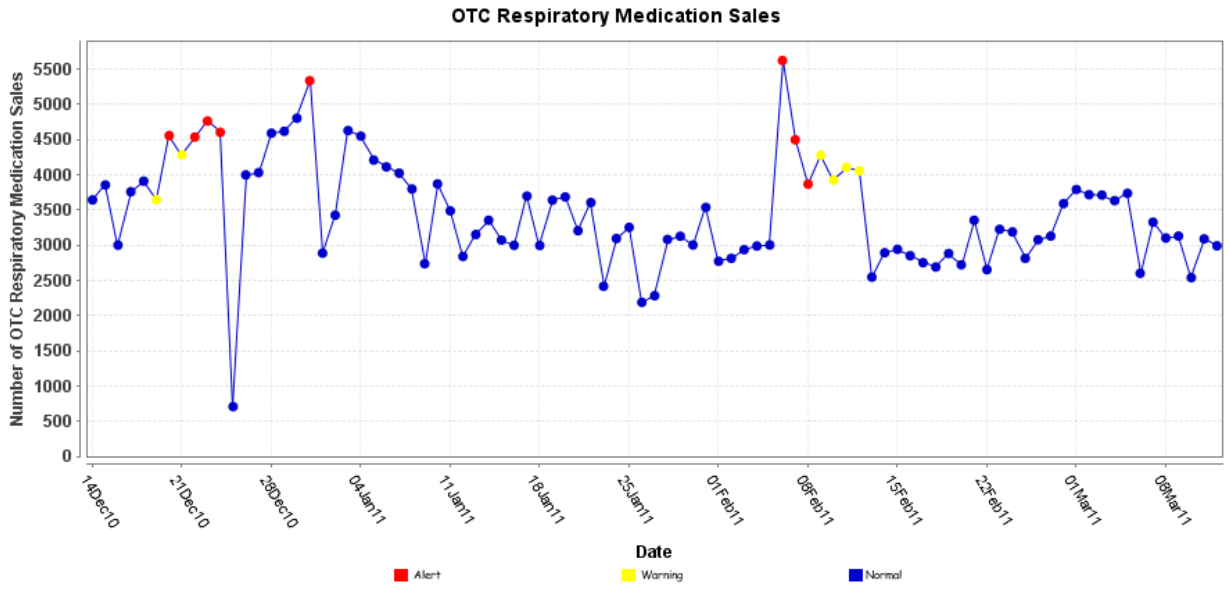
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of March 10, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 530, of which 313 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (INDONESIA): 12 March 2011, The Indonesia Ministry of Health's Biomedical and Pharmaceutical Research Center Laboratory has confirmed a positive bird flu H5N1 case. The victim is a 2 year old boy, a resident of Depok, West Java province. The child started to feel unwell on 4 Feb 2011 with signs of fever and with rashes on hand, mouth, and feet. He was then [attended by] a private practitioner, and later referred to a private hospital in Depok where he died. Risk factors: a neighbor is rearing ornamental birds. Also, a bird's death was reported within 2 weeks (before the onset of illness). A Disease Control and Environmental Health team with Health Service has been dispatched for controlling the situation. The case has been reported to WHO by the Directorate General of Disease Control and Environmental Health as the focal point of International Health Regulation.

AVIAN INFLUENZA, HUMAN (EGYPT): 11 March 2011, As of 10 Mar 2011, the Ministry of Health of Egypt has announced 2 new confirmed cases of human infection with avian influenza A (H5N1) virus and the death of a previously announced case. The 1st case is a 17 year old girl from Behira Governorate. She developed symptoms on 27 Feb 2011 and was hospitalized on 1 Mar [2011]. She is in a stable condition. The 2nd case is a 17 year old girl from Dakahlia Governorate. She developed symptoms on 24 Feb 2011] and was hospitalized on 26 Feb 2011. She died on 28 Feb 2011. Investigations into the source of infection indicate that both cases had exposure to sick and dead poultry. Both cases received oseltamivir treatment. The cases were confirmed by the Egyptian Central Public Health Laboratory, a National Influenza Center of the WHO Global Influenza Surveillance Network. The previously reported case, a 32 year old woman from Sharkia Governorate, died on 3 Mar 2011. Of the 129 cases confirmed to date in Egypt, 43 have been fatal.

AVIAN INFLUENZA (ISRAEL): 07 March 2011, Avian influenza H5 has been diagnosed in a turkey farm in the Kibbutz Rosh Zurim, district BetLehem, province of Judea and Samaria. The affected farm includes 13,400 birds. Quarantine measures and surveillance have immediately been applied. No unusual mortality has been detected in poultry farms 10 km [6 mi] around the affected farm. Veterinarians, to whom the circular is being electronically distributed, are called to alertness.

AVIAN INFLUENZA (INDIA): 06 March 2011, Fresh cases of avian influenza or bird flu have been detected in another Tripura poultry farm, and culling of birds is expected to start Monday [7 Mar 2011], an official said here Sunday. "At least 400 poultry birds have died since 1 Mar 2011 at the Gandhi Gram government poultry farm. Central government experts tested the samples of the dead birds and found them positive for the H5 strain of avian influenza," Tripura animal resource development department Joint Director Jyotirmoy Chakraborty told IANS. He said: "For further confirmation, the samples have been sent to the Eastern Region Disease Diagnostic Laboratory (ERDDL) in Kolkata and the High Security Animal Disease Laboratory (HSADL) in Bhopal. Reports from both the laboratories are expected by late Sunday [6 Mar 2011]." According to officials, if the 2 reports are confirmed positive for the H5 strain of avian influenza, the culling of birds would start from Monday [7 Mar 2011] at the government poultry farm, where more than 7,000 poultry birds are lodged. The Gandhi poultry farm, 30 km north of Agartala in western Tripura, is situated between several villages. The authorities, after culling more than 6,000 ducks and poultry birds in western Tripura last month [February 2011], had sounded a bird flu alert and had intensified surveillance across the bordering state. With the disease's outbreak at the Radha Kishore Nagar government farm, 25 km north of Agartala, the government has taken measures to check its spread in other areas. "After culling operations, the mopping, cleaning, disinfection processes have also been completed at the government-run farm and adjoining 3-4 villages. Now our officials have been maintaining special observations in these areas and other parts of the state," Chakraborty said. The government has also imposed a ban on import of poultry birds, ducks and other poultry products from outside the state. A central team from the Indian Veterinary Research Institute (IVRI) in Uttar Pradesh and another from the North Eastern Region Disease Diagnostic Laboratory (NERDDL) in Assam have visited Tripura and provided necessary assistance to the state officials. Tripura, bordering Bangladesh, was affected by avian influenza in April and May 2008, forcing the authorities to cull over 200,000 poultry birds then.

AVIAN INFLUENZA (BANGLADESH): 06 March 2011, Around 2,000 chickens have been culled in Gazipur and Noakhali following the detection of H5N1 virus, commonly known as bird flu. Gazipur Sadar Upazila livestock officer Mohammad Shamsur Rahman on Saturday [5 Mar 2011] told bdnews24.com that the bird flu infection was confirmed by the Central Diseases Investigation Laboratory in Dhaka. Some 1,137 chickens were executed around 10 pm on Friday [4 Mar 2011], when 205 eggs were also destroyed. Apart from this, in the last 2 days, over 13 000 chickens were executed in the district. The official said the district livestock department on Friday [4 Mar 2011] sent sample tissue of a dead chicken to the laboratory for tests after some of the chickens of Bushra Poultry Farm in Taratpara area died on Thursday. A direction was immediately passed to the Upazila livestock department to cull the infected chickens in a bid to stop the infection's spread in the surrounding areas. In Noakhali, about 600 chickens out of over 6,500 of a poultry farm named Shikha Agro Complex of Manikpur village under Sirajpur union died over the last few days. The local livestock department directed the farm owner to bury the dead chickens, and it banned shifting the chickens and eggs of the farm to another place. Upazila livestock officer Abul Kalam told bdnews24.com that they had confirmed the

infection following the analysis of the tissue at the district laboratory and the regional diseases investigation laboratory in Feni. "We are waiting for directives from higher authorities to cull the infected chickens," he added.

NATIONAL DISEASE REPORTS

E. COLI O157 (MULTI-STATE): 10 March 2011, The United States Centers for Disease Control and Prevention (CDC) is collaborating with public health officials in California, Michigan, Minnesota, Wisconsin, and the Food and Drug Administration to investigate a multistate outbreak of Escherichia coli O157:H7 infections. Investigators are using DNA analysis of E. coli O157:H7 bacteria obtained through diagnostic testing to identify cases of illness that may be part of this outbreak. As of 4 Mar 2011, 7 people infected with the outbreak strain of E. coli serotype O157:H7 have been reported from Michigan (1 case), Minnesota (3 cases), and Wisconsin (3 cases). Reported dates of illness onset range from 20 Dec 2010 to 28 Jan 2011. Those affected range in age from 15 to 78 years, with a median age of 62 years; 86 per cent are male. 43 per cent of those ill reported being hospitalized, and none has reported hemolytic uremic syndrome. No deaths have been reported. Collaborative investigative efforts of local, state, and federal public health and regulatory agencies have associated this outbreak with eating in-shell hazelnuts (also known as filberts). Most of the in-shell hazelnuts were purchased from bulk bins at retail food stores. Source tracing has identified a common distributor for the hazelnuts consumed by ill persons: DeFranco & Sons in Los Angeles, California. DeFranco & Sons of Los Angeles, California is voluntarily recalling bulk and consumer-packaged in-shell hazelnuts and mixed-nut products containing hazelnuts. These nuts may have been sold by retailers nationwide. The in-shell nuts may have been sold in 2-pound [about 1 kg] and 4-pound packages of mixed nuts, 1-pound packages containing only hazelnuts, or in open bins of nuts in grocery stores. Consumers are advised to review the DeFranco press release for a list of recalled products. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (OHIO): 10 March 2011, A 9th Miami Valley Hospital patient has tested positive for legionnaires' disease, and one more possible case is pending test results, a hospital spokesman said on Tuesday afternoon [8 Mar 2011]. One patient with legionnaires' disease remains hospitalized for unrelated health reasons, said Tim Cloonan, the hospital's director of marketing and communications. A Montgomery County public health official has said one patient – a Dayton man in his 70s -- died on 22 Feb 2011, but the hospital said legionella bacteria did not cause that death. The public health official had previously said the death occurred on 21 Feb 2011. It's not clear if the pneumonia-like condition may have been a contributing factor in the death of the man, whose name was not disclosed. The hospital has not yet received confirmation that legionella bacteria had been present in the water system of its new hospital addition, called the "patient tower". Those results are expected this Saturday [12 Mar 2011]. The hospital instituted water restrictions in the patient tower for 3 days last month [February 2011] and disinfected the water system as a precaution. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

YELLOW FEVER (SIERRA LEONE): 12 March 2011, On 8 Feb 2011, the Ministry of Health in Sierra Leone notified the World Health Organization (WHO) of 2 cases of yellow fever in Jahun village in Bonthe district, Southern province. The index case was a 40 year old woman, who developed symptoms on 17 Jan 2011 and tested positive for IgM by ELISA test conducted by Institut Pasteur in Abidjan on 1 Feb 2011. The WHO reference laboratory for yellow fever at the Institut Pasteur in Dakar confirmed the case on 8 Feb 2011. The 2nd case was an 18 year old man identified during an outbreak investigation between 11-14 Feb [2011]. The case tested positive for IgM by ELISA test conducted by the Institute Pasteur in Abidjan. Neither of the cases had a history of yellow fever vaccination. On 5 Mar 2011, the Ministry of Health of Sierra Leone began a response vaccination campaign targeting 144 479 people aged 9 months and above, excluding pregnant women in Bonthe district. Sierra Leone benefited from a yellow fever preventive mass vaccination campaign in 2009, which covered 11 out of 13 districts in the country, excluding Bonthe and Bombali districts. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (CANADA): 10 March 2011, The British Columbia Centre for Disease Control [BCCDC] is warning that jars of watermelon jelly that were sold at charity booths around BC the summer of 2010 could contain botulism. A rare case of botulism on Vancouver Island has sparked a recall of 120 ml jars of the jelly made by Jamnation Fine Foods, according to Sion Shyng, a food safety specialist at the BCCDC. "The jelly was sold through the British Columbia Huntingtons Research Foundation charity booths in Duncan, and may also have been sold in other parts of province," explains Shyng. "We're concerned that this product may still be in the homes of consumers as jellies can be stored and consumed long after they are purchased." The BCCDC is currently working with BC Health Authorities and the BC Ministry of Health Services to ensure the recalled product is removed from distribution and is investigating any possible cases of illness. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

LASSA FEVER (SWEDEN): 09 March 2011, A Swedish woman is being treated at the intensive care unit of Linkoping University Hospital in eastern Sweden after being diagnosed with the deadly disease Lassa fever. The woman was infected in West Africa, where she had been working for a humanitarian aid organization. She is the 1st patient ever to be treated for Lassa fever in Sweden. The woman's condition is stable, but she will remain isolated for another few weeks, according to infectious disease specialist Britt Akerlind. The woman, who is in her 30s, was flown home on a medical transport flight and arrived in Sweden on Monday [7 Mar 2011] morning. "She tested positive for the disease in Africa. We have since conducted some tests here, but the results are not in yet. We are treating this as a serious illness," Akerlind told news agency TT. The symptoms of Lassa fever, which

infects between 300,000 and 500,000 people annually, include a high temperature and internal hemorrhaging, but the majority of those that contract the disease make a full recovery. "Only about one per cent of those infected become seriously ill, and it is impossible to know in advance who will be affected worse than others," Akerlind told TT. Rodents are often carriers of Lassa fever, and the disease is spread through contact with their faeces. Between humans, the disease is passed through the exchange of bodily fluids. How the Swedish woman caught the disease is unknown. According to Akerlind there is no risk that Lassa fever, which claims around 5,000 lives annually, will spread in Sweden. "There is no threat to the public whatsoever," she told TT. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

NIPAH ENCEPHALITIS (BANGLADESH): 08 March 2011, Another young boy died from Nipah virus encephalitis disease at Rangpur Medical College Hospital (RMCH) this afternoon [5 Mar 2011] raising the death toll to 35 in the region, health officials said, reports BSS [Bangladesh Sangbad Sangstha, national news agency of Bangladesh]. The latest victim was identified as a 6 year old of Sherpur village under Taraganj upazila [sub district] in Rangpur. He died at the RMCH after his admission there this afternoon [5 Mar 2011]. There is no Nipah patient at the RMCH [currently] with the release today of a recovered man, age 40, of Singria village under Atoari upazila in Panchagarh. He was admitted on 19 Feb [2011]. Rangpur divisional director of health Dr Shahadat Hossain informed BSS that precautionary measures are continuing despite substantial reduction in the spate of the Nipah virus [infections]. Since its outbreak in Rangpur region from last 31 Jan [2011], 35 persons including babies, boys, adolescents, and women died of the incurable Nipah virus encephalitis disease, he said. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

TRICHINELLOSIS (SPAIN): 06 March 2011, An outbreak of trichinellosis was detected in Huesca [Autonomous Community of Aragon], affecting 5 men and one woman, all residents of Huesca and aged between 52 and 58 years, who ate sausages from the meat of a wild boar that one of them had hunted and which was not subjected to the required veterinary control. The 6 people began feeling ill on 5 Feb 2011. They consulted the San Jorge de Huesca hospital and were not admitted at first, but their condition deteriorated, and they were readmitted days later. One of them, a 54-year-old man, died yesterday [1 Mar 2011]. According to Aragon public health officials, the brother of the deceased remains in serious but stable condition in the intensive care unit; the 3 other men are in stable condition, and the woman has been released. Public health officials have indicated that the source of the outbreak was the wild boar meat. The rest of the meat was identified and taken for testing and to prevent further cases of the disease. The main reservoirs of the trichinellosis parasite are domestic animals such as pigs or wild animals such as wild boars or foxes. Transmission of the disease occurs through consumption of raw or insufficiently cooked meat or meat products infected with the larvae of the Trichinella worm. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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